

# SUMMARY OF STATEMAP GEOLOGIC MAPPING PROGRAM IN ARIZONA

Fiscal Year	Project Title	State Dollars	Federal Dollars	Total Dollars
1993	Western Arizona: SE Plomosa Mts., 1:12,000; Tank and Palomas Mts., 1:24,000; central Gila Bend Mts., 1:50,000; Salome and Little Horn 30' x 60' sheets, 1:100,000	92,464	80,161	172,625
1994	Northeast of Phoenix: Picketpost Mt., Superstition Mts. SW, 1:24,000; east ½ of Mesa 30' x 60' Quad., 1:100,000; surficial maps of ten 7 1/2' quads northeast of Phoenix	80,000	80,000	160,000
1995	Northeast of Phoenix: Apache Junction and Buckhorn 7 1/2' quads, 1:24,000; Mesa 30' x 60', 1:100,000; surficial maps of five 7 1/2' quadrangles NE of Phoenix	55,000	55,000	110,000
1996	East of Phoenix: Mormon Flat Dam and Horse Mesa 7 1/2' Quadrangles, 1:24,000; surficial map of Theodore Roosevelt Lake 30' x 60' Quadrangle, 1:100,000	136,247	136,247	272,494
1997	East of Phoenix: Five 7 1/2' quads, 1:24,000; Digital maps of Mesa, western Theodore Roos. Dam, Globe 30' x 60' Quads; Surficial maps, Casa Grande area, six 7 1/2' Quads	151,042	151,036	302,078
1998	North and west of Tucson: Sawtooth Mts., Samaniego Hills, Picacho Mts., and Ninetysix Hills, 1:24,000; Surficial maps of Tucson Mts. and Catalina Foothills	135,582	135,577	271,159
1999	Greater Tucson area: Avra Valley, Roskrige Mts, six 7 1/2' quads, 1:24,000; Oracle - Catalina area, two 7 1/2' quads, 1:24,000; Green Valley, four 7 1/2' quads, 1:24,000	127,123	126,401	253,524
2000	Phoenix - Tucson corridor: Mescal - Vail area, four 7 1/2' quads; surficial maps, Tubac area, two 7 1/2' quads; digital maps, Tucson - Phoenix corridor, 1:24,000 and 1:100,000	147,633	145,535	293,168
2001	Phoenix - Tucson corridor: NW Tucson area, 1:24,000; Buckeye Hills, Phoenix area, 1:24,000; Digital compilation, Tucson - Phoenix corridor, 1:24,000 and 1:100,000	227,614	227,325	454,939
2002	Phoenix-Tucson corridor: Sierrita Mts., 1:24,000; Benson-Huachuca City, 1:24,000; digital map compilation, east Phoenix area.	235,414	235,000	470,414
2003	Southern and western Arizona: Hassayampa Plain 1:24,000; Southeast Tucson 1:24,000; Bullhead City 1:24,000; Digital map compilation, Phoenix area.	211,174	210,665	421,839
2004	Southern and western Arizona: San Pedro trough 1:24,000; western Maricopa County 1:24,000; eastern Pima County digital compilation, 1:100,000	220,791	217,439	438,230
2005	Southern and western Arizona: San Pedro trough 1:24,000; Bullhead City 1:24,000; east Yuma 1:24,000; Gila Bend, Casa Grand, San Manuel digital compilations, 1:100,000	199,293	197,977	434,878
2006	Southern and western Arizona: San Pedro trough 1:24,000; Black Canyon City 1:24,000; Maricopa-Stanfield 1:24,000; SE Arizona digital compilation, 1:100,000	202,392	202,392	404,784
	<b>TOTALS</b>	<b>2,221,770</b>	<b>2,200,755</b>	<b>4,422,525</b>

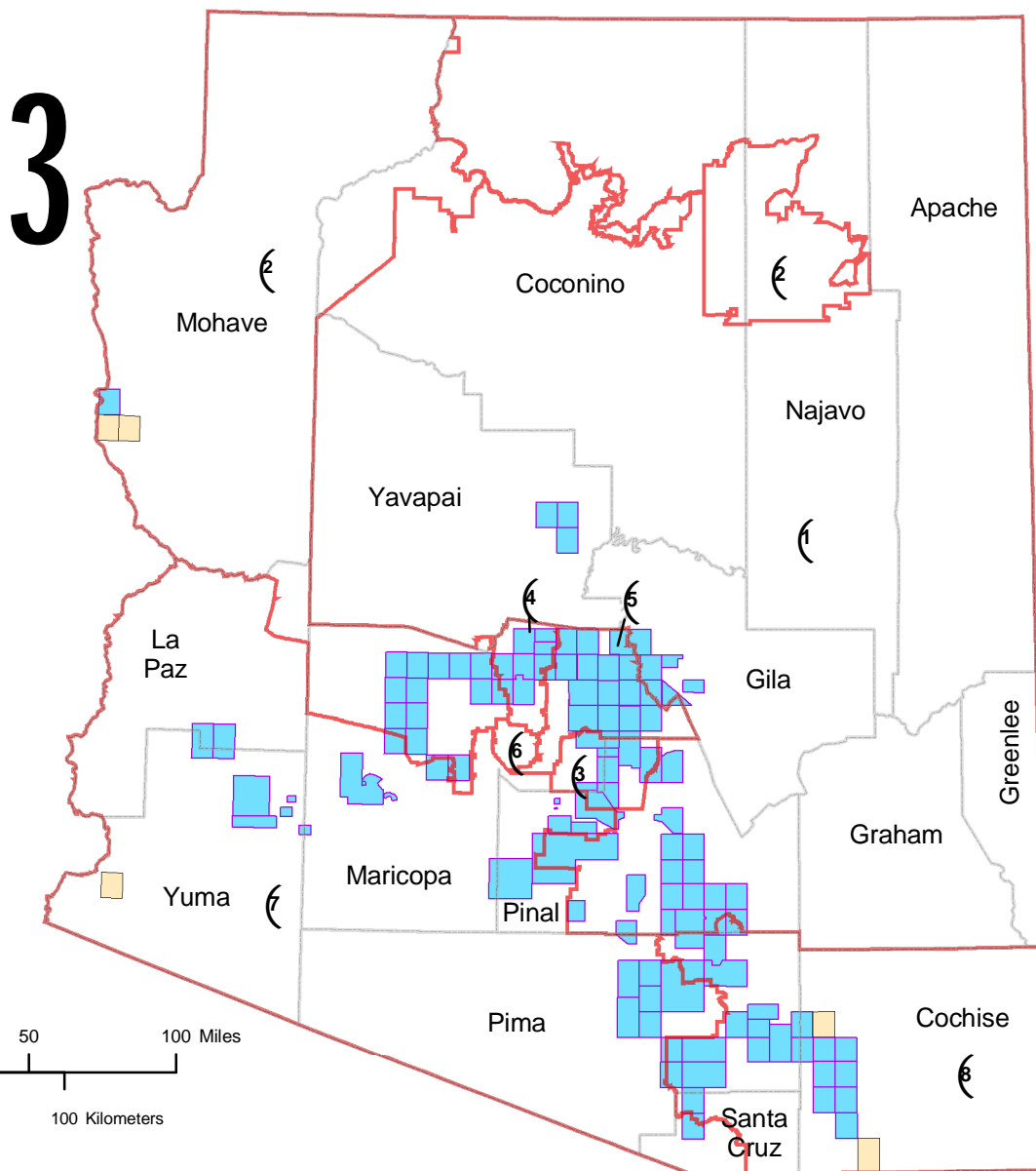
For the past 50 years Arizona has had one of the fastest population-growth rates in the U.S. Most of the growth has been, and will continue to be, in the metropolitan Phoenix and Tucson areas in southern Arizona. Approximately 80 percent of Arizona's population of 5 million people live in the 20 percent of the state known as the Phoenix-Tucson metropolitan corridor. The rest of the State is also experiencing rapid population growth, but populations are much smaller.

In recognition of this large and rapidly growing population, and to follow the intent of the National Geologic Mapping Act to address societal needs, the Arizona Geologic Mapping Advisory Committee strongly recommended that the Arizona Geological Survey give highest priority to completing detailed geologic maps and digital map products in the Phoenix-Tucson corridor. The Arizona Geological Survey has largely completed mapping this area and, as recommended by its Advisory Committee, is beginning to focus mapping on outlying, smaller communities and developing areas.

In a recent outcome of geologic mapping in Arizona, a building materials company was able to locate a groundwater source that they needed to open a quarry. In a letter dated Sept, 2, 2004, Robert A. Lindsell Jr., of Kalamazoo Materials, Inc., stated the following: "Well, it's been almost a year since we hit the "big well" at our Durham Hills Quarry and I thought it was time I officially thank you and the staff at the Arizona Geological Survey for your part in making our project a success....we had spent over \$40,000 with nothing to show for it except 2 dry holes to 1200 ft. each. By having the recently completed geologic maps of the Durham Hills and Chief Butte areas (DGM-19 & DGM-22) available as reference material, we were able to reason the confidence we needed to aim our drill at the buried detachment fault in the area..." The water source was found in the crushed rocks along the buried fault.

## NATIONAL COOPERATIVE GEOLOGIC MAPPING PROGRAM

STATEMAP Component: States compete for federal matching funds for geologic mapping



### Geologic Maps funded by STATEMAP, Arizona, 1994-2006

#### Map Legend

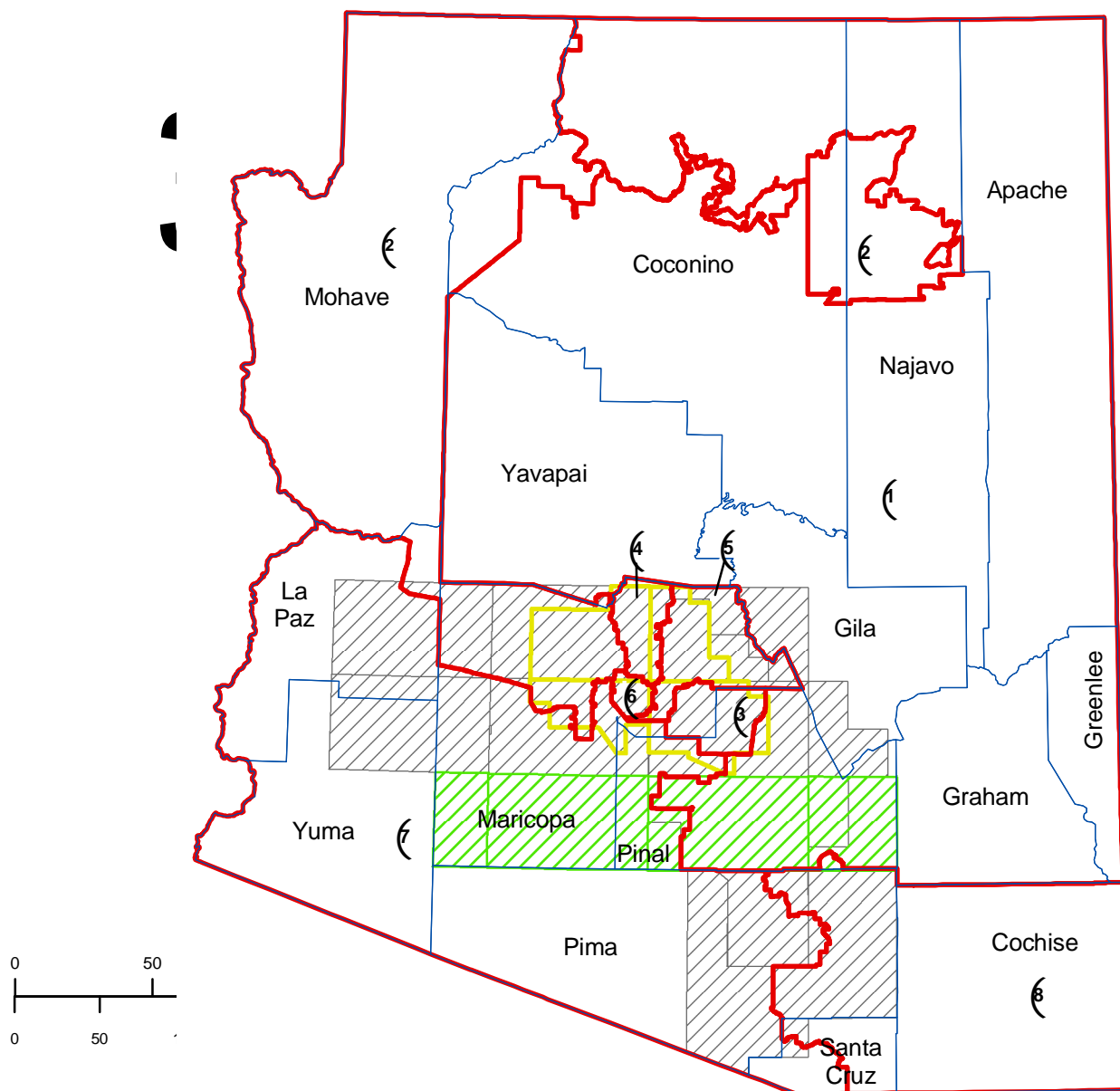
- County boundaries
- Congressional District boundaries
- ⑥ Congressional District Numbers

#### Geologic Maps (Open-File Reports and Digital Geologic Maps)

- 1:24,000-scale bedrock and surficial mapping
- In Progress 1:24,000-scale bedrock and surficial maps




Updated May, 2006

## NATIONAL COOPERATIVE GEOLOGIC MAPPING PROGRAM






### Geologic Digital Information products funded by STATEMAP, Arizona, 1994-2006

#### Map Legend

-  County boundaries
-  Congressional District boundaries
-  Congressional District Numbers

#### Digital Information Products

-  1:24,000-scale digital geologic database
-  1:100,000-scale compilation digital geologic database
-  In preparation 1:100,000-scale digital geologic database

\* Not shown is the "Geologic Map of Arizona, GIS Database, Version 3.0", a digital geologic database covering the entire state (DI-08, v. 3.0).

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